IPRIMED Education Solutions Private Limited

Report on project

STUDENT MANAGEMENT SYSTEM

Submitted by

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HARMAN C++ BATCH 05

Business Requirements Specification (BRS)

Background of the project

- The objective of Student information System is to allow the administrator of any organization to add, edit, delete and view details of the students.
- Students can also be able to view their data along with other student's data
- It'll also facilitate keeping all the records of students, such as their id, name, mailing address, phone number, DOB etc.
- So, all the information about a student will be available in a few seconds.
- Overall, it'll make Student Management an easier job for the administrator and the student of any organization.
- The main purpose of the student management System is to help any organization to maintain and manage its student's data

Goals of project

- The main goal is to simplify and streamline all tasks.
- To reduce unnecessary paperwork in maintaining student's information.
- To provide data integrity, privacy and security.
- To manage details of student's profile

Problem Statement

The problems occur when there are no digital records because of all paperwork some of them are mentioned which are: File lost / damaged, Human error, Space consuming and Cost consuming. File lost because of human environment. File damaged when a computerized system is not their file is always lost due to some accident like of water by some member on file accidentally. Besides some natural disaster like floods or fires may also damage the files. Some human error there may be a loss of records. Difficult to search record When there is no computerized system there is always a difficulty in searching of records if the records are large in number. Space consuming as it requires physical storage. As there is no computerized system to add each record paper will be needed which will increase the cost the management of library.

Solution / Proposed System

- In our proposed system we have the provision for adding, modifying, deleting and viewing the details of the students by admin.
- So, the overhead of the management authorities and the teachers is become less.
- Another advantage of the system is that, students can view academic and personal details.
- The marks of the student are added in the database and so students can also view the marks whenever they want
- All the manual difficulties in managing the student details have been rectified by implementing computerization.

Our proposed system has several advantages:

1. User friendly interface
2. Access to database

3. Less error
4. Look and Feel Environment
5. User authentication
6. Time efficient

Users of project

1) **Admin**

   Admin has the power to add, modify, delete, display, and view the details of students.

2) **Student**

   Student can login and be able to view his details along with the other student details

Requirements

Software Requirements:

- Windows/ Any OS capable of running C++
- Visual Studio
- PostgreSQL

Hardware Requirements:

- Processor: Intel P-IV System
- Processor Speed: 250 MHz to 833 MHz
- Ram: 512 Mb Ram
- Hard Disk: 40 Gb

The functional requirements of the student management system are:

- Register admin
- Register new students.
- Record the unique student id of students.
- Record the marks of students.
- Record the fees details of students.
- Record the contact details of students.
- Register a new user for the system.
- Record the guardian details of students.
- Record the course information.
- Record the location of students.
- Display all the students information.

Non- Functional Requirements of the student management system are:

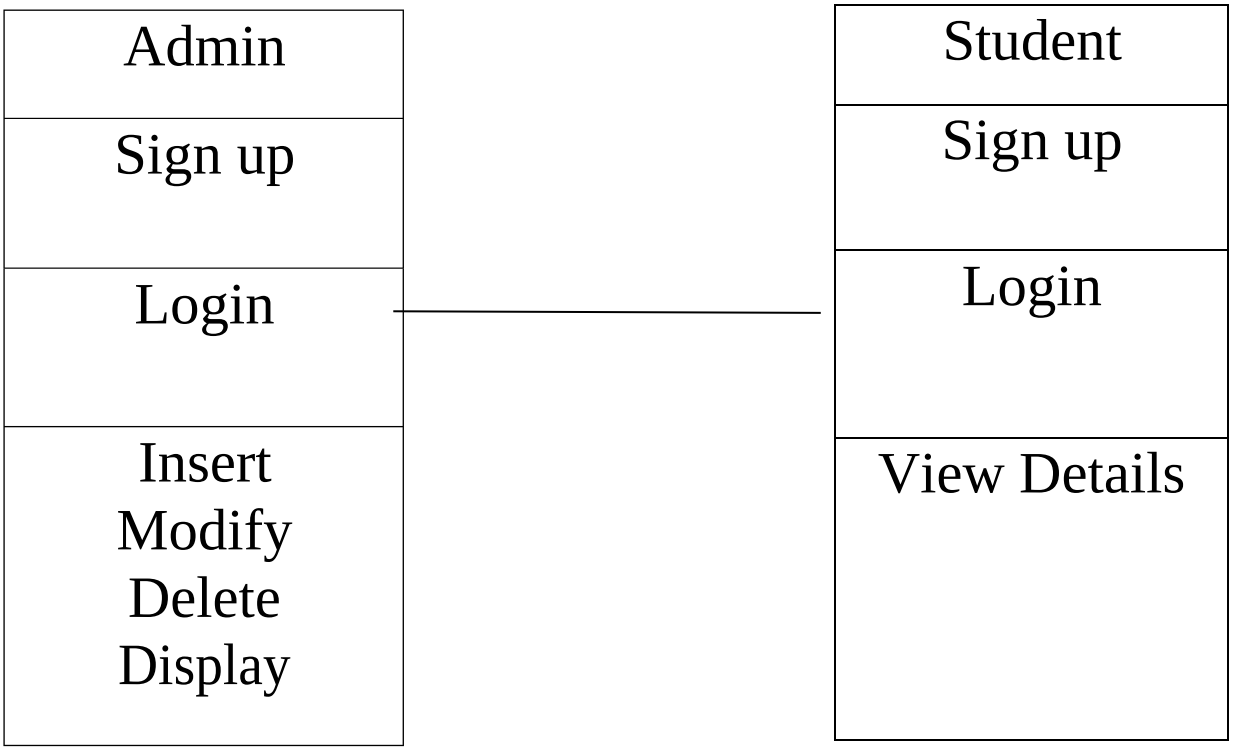
- In this system, the authentication of the user is an important factor. In this system, user authentication will be done by login by user name and password and classified by user type. Users will get access to the system as permissions are classified for that type of user.
- The system has a consistent interface so that the system is easy to use and in the interface of our system has detailed information about all control panels that guides the user at each stage.

DATABASE Design

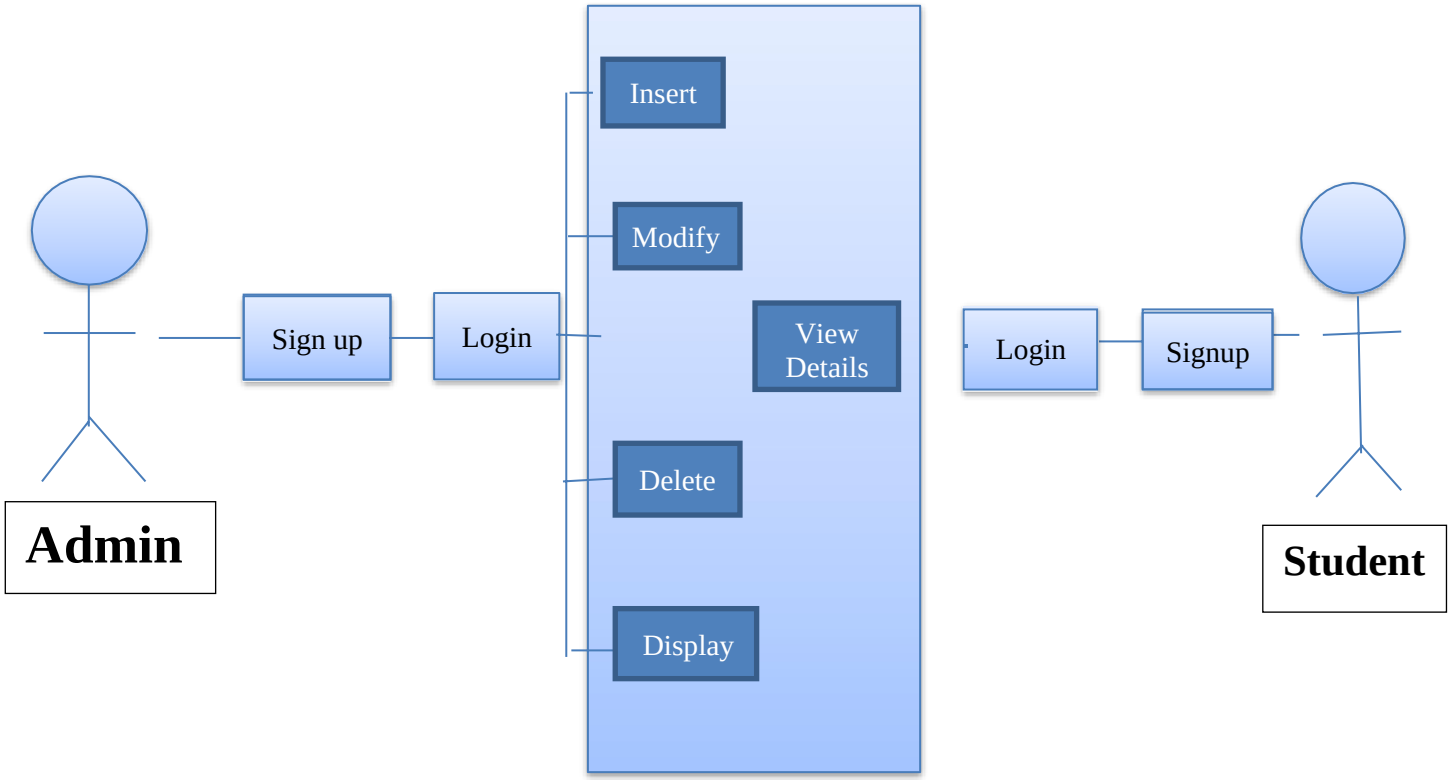
STUDENT

Student
❖ Name ❖ Roll no ❖ Course ❖ Marks ❖ Fee ❖ Aadhar ❖ Duration ❖ Phone ❖ Email ❖ Location ❖ Guardian ❖ Gender

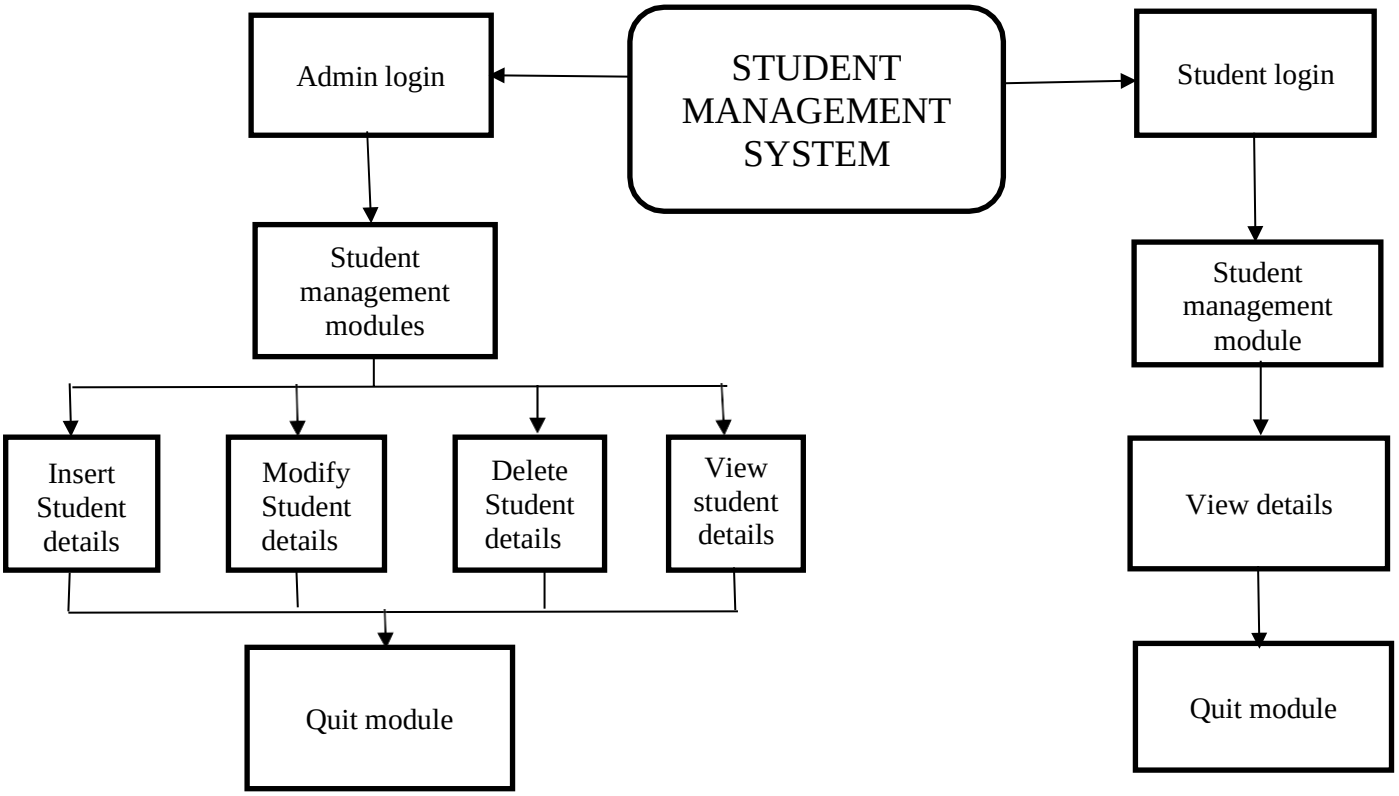
Class diagram



Use case diagram



Architecture diagram



Release Notes

INTRODUCTION

- The student management system is an environment where all the process of the student in the institution is managed. It is done through the automated computerized method. Conventionally this system is done using papers, files, and binders.

- This system saves the time of the student and of the administrator. It includes processes like registration of the student's details, assigning the department based on their course, and maintenance of the record. This system reduces the cost and workforce required for this job. As the system is online the information is globally present to everyone.

- This makes the system easy to handle and feasible for finding the omission with updating at the same time. As for the existing system, they use to maintain their record manually which makes it vulnerable to security. If filed a query to search or update in a manual system, it will take a lot of time to process the query and make a report which is a tedious job.

- As the system used in the institute is outdated as it requires paper, files, and binders, which will require the human workforce to maintain them. To get registered in the institute, a student in this system should come to the university. Get the forms from the counter while standing in the queue which consumes a lot of the student's time as well as of the management team.

- As the number of the student increases in the institute manually managing the strength becomes a hectic job for the administrator. This computerized system stores all the data in the database which makes it easy to fetch and update whenever needed.

Compatible Products

This project has been tested on the Windows OS platforms.

Upgrades

- In the current system we need to keep a number of records related to the

student and want to enter the details of the student and the marks manually. In this system only the teacher or the school authority views the mark of the student and they want to enter the details of the student. This is time consuming and has much cost

- In our student management system, we have the provision for adding, modifying, deleting and viewing the details of the students by admin.
- So, the overhead of the management authorities and the teachers is become less.
- Another advantage of the system is that, students can view academic and personal details.
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Future

- The student Management System will increase to include the other functions like Marks, Fee and also for the attendance maintaining purpose.
- Classes can be held in Virtual Mode.
- Examination can also be held in Virtual mode.
- Student academic related activities can be Monitored by their Parents from their respective websites.